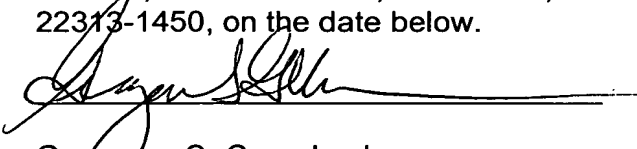


Patent
PD-201014
Customer No. 020991

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Ernest C. Chen : I hereby certify that this correspondence is
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SPECTRAL EFFICIENCIES FOR : 22313-1450, on the date below.
LAYERED AND CONVENTIONAL :
MODULATIONS : 
: Georgann S. Grunebach
: Typed or printed name of person signing certificate
Group Art Unit: To be determined :
Examiner: To be determined : Date: April 25, 2005

INFORMATION DISCLOSURE STATEMENT

Mail Stop PCT
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The references cited on the enclosed form PTO/SB/08A may be relevant or material to the examination of the above-identified patent application and are, therefore, submitted in compliance with the duty of disclosure defined in 37 CFR 1.56. It is respectfully requested that the references be considered and made of record in the application identified above.

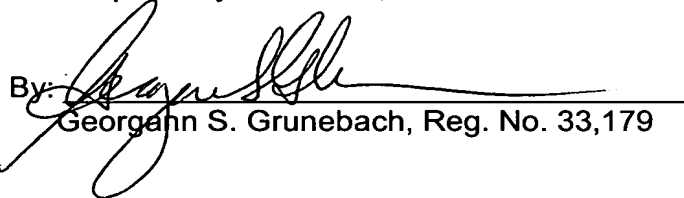
This statement should be considered because it is being submitted within three months of the date of entry of the national stage as set forth in §1.491 in an international application under 37 C.F.R. §1.97(b)(2). Accordingly, it is submitted that no fee is due in this matter.

However, if it is determined that any appropriate fee is due, the Commissioner is hereby authorized to charge Deposit Account No. 50-0383 of Hughes Electronics Corporation, El Segundo, California.

U.S. National Stage of International Application No. PCT/US03/032800.....Page 2

This Information Disclosure Statement is not to be construed as a representation that a search has recently been made, that additional information material to the examination of this application does not exist, or that this citation constitutes prior art.

Respectfully submitted,

By: 
Georgann S. Grunebach, Reg. No. 33,179

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April 25, 2005

10/532619

JC12 Rec'd PCT/PTC 25 APR 2005

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Complete if Known	
	Application Number	To be assigned
	Filing Date	Herewith
	First Named Inventor	Ernest. C. Chen
	Art Unit	To be assigned
	Examiner Name	To be assigned
Sheet 1 of 1	Attorney Docket Number	PD-201014

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number Number-Kind Code	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-5,970,098	10-19-1999	Herzberg, Hanan	
		US-6,125,148	09-26-2000	Frodigh, Carl Magnus et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document Country Code-Number-Kind Code	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		EP 0 222 076 A2	08-14-1986	Ketterling, Hans-Peter et al.		

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.